Title of Instructional Materials: Agile Mind

Grade Level: Grade 8

Summary of Agile Mind

Overall Rating:	 Weak (1-2) Moderate (2-3) Strong (3-4)	Important Mathematical Ideas:	 Weak (1-2) Moderate (2-3) Strong (3-4)
Summary / Justification / Evidence: Very good job with real-world examples, completely interactive, user-friendly, connects well between skills, assessments are good, great activity sheets, aligned well with Common Cores, on-line curriculum		Summary / Justification / Evidence:	
Skills and Procedures:	☐ Weak (1-2) ☐ Moderate (2-3) ☑ Strong (3-4)	Mathematical Relationships:	 Weak (1-2) Moderate (2-3) Strong (3-4)
Summary / Justification / Eviden	ce:	Summary / Justification / Eviden	ice:

1. Make sense of problems and persevere in solving them.			
Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze			
givens, constraints, relationships, and goals. They make conjectures about th	e form and meaning of the solution and plan a solution pathway rather than		
simply jumping into a solution attempt. They consider analogous problems, a	and try special cases and simpler forms of the original problem in order to		
gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of			
the problem, transform algebraic expressions or change the viewing window	on their graphing calculator to get the information they need.		
Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of			
important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures t			
help conceptualize and solve a problem. Mathematically proficient students of	check their answers to problems using a different method, and they		
continually ask themselves, "Does this make sense?" They can understand th	e approaches of others to solving complex problems and identify		
correspondences between different approaches.			
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are missing			
	or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:			
,	Overall Rating : □1 □2 □3 □4		
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2. Reason abstractly and quantitatively.		
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to		
bear on problems involving quantitative relationships: the ability to <i>decontextualize</i> —to abstract a given situation and represent it symbolically and		
manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize,		
to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits o		
creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to		
compute them; and knowing and flexibly using different properties of operations and objects.		
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	
Summary / Justification / Evidence:	Overall Rating:	

3. Construct viable arguments and critique the reasoning of other	rs.		
Mathematically proficient students understand and use stated assumptions,			
They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by			
breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the			
arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose.			
Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that			
which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such a			
objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until late			
grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others, decidents at all grades can listen or read the arguments of others.			
whether they make sense, and ask useful questions to clarify or improve the arguments.			
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are miss			
	or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:			
	Overall Rating : $\Box 1 \Box 2 \Box 3 \Box 4$		

4. Model with mathematics.			
Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early			
grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning			
plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to			
describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making			
assumptions and approximations to simplify a complicated situation, realizing		, , , , , , , , , , , , , , , , , , ,	
quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can			
analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and			
reflect on whether the results make sense, possibly improving the model if it has not served its purpose.			
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are missi			
or not well developed in the instructional materials (i			
Summary / Justification / Evidence:			
	Overall Rating:	$\Box 1 \Box 2 \Box 3 \Box 4$	
	1		

5. Use appropriate tools strategically.			
Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper,			
concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software.			
Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools			
might be helpful, recognizing both the insight to be gained and their limitatio			
graphs of functions and solutions generated using a graphing calculator. The			
mathematical knowledge. When making mathematical models, they know that			
assumptions, explore consequences, and compare predictions with data. Mat			
relevant external mathematical resources, such as digital content located on			
technological tools to explore and deepen their understanding of concepts.	, and the second		
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are missing			
or not well developed in the instructional materials (if an			
	of not well developed in the instructional materials (if any).		
Summary / Justification / Evidence:			
	 Overall Rating :		

6. Attend to precision.			
Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own			
reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about			
specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently,			
express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated			
explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.			
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Portions of the domain, cluster, and standard that are missing		
	or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:			
building / justification / Evidence.	Overall Rating :		
	Overall maning.		

7. Look for and make use of structure.			
Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more i			
the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see			
$^{\circ}$ — 8 equals the well-remembered 7 $^{\circ}$ — 5 + 7 $^{\circ}$ — 3, in preparation for learning about the distributive property. In the expression x^2 + 9 x + 14, older			
students can see the 14 as 2 °— 7 and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of			
drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as			
some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)2$ as 5 minus a positive			
number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.			
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are missin			
or not well developed in the instructional materials (if a			
Summary / Justification / Evidence:			
building / Justification / Evidence.	Overall Rating:	\Box_1 \Box_2 \Box_3 \Box_4	
	Over an Nating.		

8. Look for and express regularity in repeated reasoning.			
Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students			
might notice when dividing 25 by 11 that they are repeating the same calcula			
paying attention to the calculation of slope as they repeatedly check whether			
might abstract the equation $(y-2)/(x-1) = 3$. Noticing the regularity in the v			
$1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient			
students maintain oversight of the process, while attending to the details. The	ey continually evaluate the reasonableness of their intermediate results.		
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Portions of the domain, cluster, and standard that are missing		
	or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:			
	Overall Rating: $\Box 1 \Box 2 \Box 3 \Box 4$		

Domain:	Summary and documentation of how the domain, cluster, and		
The Number System	standard are met. Cite examples from the materials.		
8.NS.1 Understand informally that every number has a decimal expansion; the rational numbers are those with decimal expansions that terminate in 0s or eventually repeat. Know that other numbers are called irrational.	Important Mathematical Ideas: 1 2 3 4 Skills and Procedures: 1 2 3 4 Mathematical Relationships: 1 2 3 4		
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:		
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:		

Domain:	Summary and documentation of how the domain, cluster, and		
The Number System	standard are met. Cite examples from the materials.		
Standard: 8.NS.2	Important Mathematical Ideas:		
	Mathematical Relationships:1234		
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:		
Indicate the chapter(s), section(s), and/or page(s) reviewed:			
	Overall Rating : $\Box 1 \Box 2 \Box 3 \boxtimes 4$		

Domain:	Summary and documentation of how the domain, cluster, and		
Expressions and Equations	standard are met. Cite examples from the materials.		
Standard: 8.EE.1	Important Mathematical Ideas: Skills and Procedures:	□1 □2 □3 □4 □1 □2 □3 □4	
	Mathematical Relationships:	<u> </u>	
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evider	ice:	
Indicate the chapter(s), section(s), and/or page(s) reviewed:			
	Overall Rating:	$\square 1$ $\square 2$ $\square 3$ $\boxtimes 4$	

Domain:	Summary and documentation of how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples from the materials.
Standard: 8.EE.2	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Cube roots are not evident
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\square 1 \square 2 \square 3 \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
8.EE.3	
	Skills and Procedures: $\Box 1 \Box 2 \Box 3 \Box 4$
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Comparison with scientific notation not evident
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\Box 1 \Box 2 \Box 3 \Box 4$

Domain:	Summary and documentation of	how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard: 8.EE.4	Important Mathematical Ideas: Skills and Procedures:	□1 □2 □3 □4 □1 □2 □3 □4
	Mathematical Relationships:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Eviden	nce:
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	☐1 ☐2 ☐3 ☐4

Domain:	Summary and documentation of	how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard: 8.EE.5	Important Mathematical Ideas: Skills and Procedures:	□1 □2 □3 □4 □1 □2 □3 □4
	Mathematical Relationships:	
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evider	ice:
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	<u> </u>

Domain:	Summary and documentation of	how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard: 8.EE.6	Important Mathematical Ideas: Skills and Procedures:	□1 □2 □3 □4 □1 □2 □3 □4
	Mathematical Relationships:	$\square 1 \square 2 \square 3 \square 4$
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Eviden	ice:
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	$\square 1$ $\square 2$ $\square 3$ $\boxtimes 4$

Domain:	Summary and documentation of	how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard: 8.EE.7a	Important Mathematical Ideas: Skills and Procedures:	□1 □2 □3 □4 □1 □2 □3 □4
	Mathematical Relationships:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evider	nce:
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	☐1 ☐2 ☐3 ☐4

Domain:	Summary and documentation of how	w the domain, cluster, and
Expressions and Equations	standard are met. Cite examples fro	om the materials.
Standard: 8.EE.7b	Important Mathematical Ideas: Skills and Procedures: Mathematical Relationships:	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Deutieur of the demain deutem and standard that are missing	1	<u> </u>
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:	
or not well developed in the instructional materials (if any):		
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	<u> 1 2 3 \(\(\) 4 </u>

Domain:	Summary and documentation of how the dom	ain, cluster, and
Expressions and Equations	standard are met. Cite examples from the mat	terials.
Standard: 8.EE.8a	Important Mathematical Ideas:	□3 □4 □3 □4 □3 □4
Portions of the domain, cluster, and standard that are missing		<u> </u>
or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating: 1 2	3 <u>⊠</u> 4

Domain:	Summary and documentation of	how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard: 8.EE.8b	Important Mathematical Ideas: Skills and Procedures:	□1 □2 □3 □4 □1 □2 □3 □4
	Mathematical Relationships:	
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evider	ice:
or not non actoroped in one more detional materials (if any)!		
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	☐1 ☐2 ☐3 ☑4

Domain:	Summary and documentation of	how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard: 8.EE.8c	Important Mathematical Ideas: Skills and Procedures:	□1 □2 □3 □4 □1 □2 □3 □4
	Mathematical Relationships:	<u> </u>
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evider	ice:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:	\Box 1 \Box 2 \Box 3 \boxtimes 4

Domain:	Summary and documentation of how the domain, cluster, and
Functions	standard are met. Cite examples from the materials.
Standard:	
8.F.1	Important Mathematical Ideas:134
0.F.1	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Not well-developed
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\square 1 \square 2 \square 3 \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Functions	standard are met. Cite examples from the materials.
Standard: 8.F.2	Important Mathematical Ideas:
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Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\Box 1 \Box 2 \Box 3 \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Functions	standard are met. Cite examples from the materials.
Standard: 8.F.3	Important Mathematical Ideas:
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Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\Box 1 \Box 2 \Box 3 \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Functions	standard are met. Cite examples from the materials.
Standard: 8.F.4	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	bulling , justification , Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\Box 1 \Box 2 \Box 3 \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Functions	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas:
8.F.5	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Students aren't asked to sketch graphs
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\Box 1 \Box 2 \boxtimes 3 \Box 4$

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
8.G.1a	
	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Not clearly defined; it's an understood concept through practice
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating: $\square 1 \square 2 \square 3 \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
8.G.1b	<u> </u>
	Skills and Procedures: 1 2 3 4
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Not clearly defined; it's an understood concept through practice
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\square 1 \square 2 \square 3 \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard:	
0.04-	Important Mathematical Ideas:
8.G.1c	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Not addressed
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\square 1 \square 2 \square 3 \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard: 8.G.2	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of	how the domain, cluster, and
Geometry	standard are met. Cite examples	from the materials.
Standard:	Important Mathematical Ideas:	□1 □2 □3 □4
8.G.3	Skills and Procedures:	□1 □2 □3 □4
	Mathematical Relationships:	□1 □2 □3 □4
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evider	nce:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:	□1 □2 □3 ⊠4

Domain:	Summary and documentation of	how the domain, cluster, and
Geometry	standard are met. Cite examples	from the materials.
Standard:		
	Important Mathematical Ideas:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
8.G.4		
	Skills and Procedures:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
	Mathematical Relationships:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evider	ice:
or not well developed in the instructional materials (if any):	Not found anywhere in program	
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	$\square 1$ $\square 2$ $\square 3$ $\square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard: 8.G.5	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard: 8.G.6	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard: 8.G.7	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\Box 1 \Box 2 \Box 3 \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard: 8.G.8	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating: $\Box 1 \Box 2 \Box 3 \boxtimes 4$

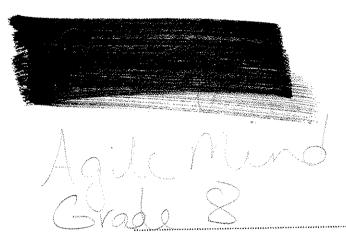
Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard: 8.G.9	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
8.SP.1	
	Skills and Procedures: $\Box 1 \Box 2 \Box 3 \Box 4$
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Concept of outliers is not developed
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating : $\square 1 \square 2 \square 3 \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
8.SP.2	
	Skills and Procedures: $\Box 1$ $\Box 2$ $\boxtimes 3$ $\Box 4$
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	No comparisons between points and lines of best fit
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating: $\square 1 \square 2 \square 3 \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard: 8.SP.3	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating :

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard: 8.SP.4	Important Mathematical Ideas:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence: No evidence of 2-way table
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating: \Bigsilon 1 \Bigsilon 2 \Bigsilon 3 \Bigsilon 4



Instructional Materials Analysis and Selection

Phase 3: Assessing Content Alignment to the Common Core State Standards for Mathematics

Overall Rating: 0/3 -> Missing 10 m. Grade 8

Potty not

Instructional Materials Analysis and Selection

Phase 3:

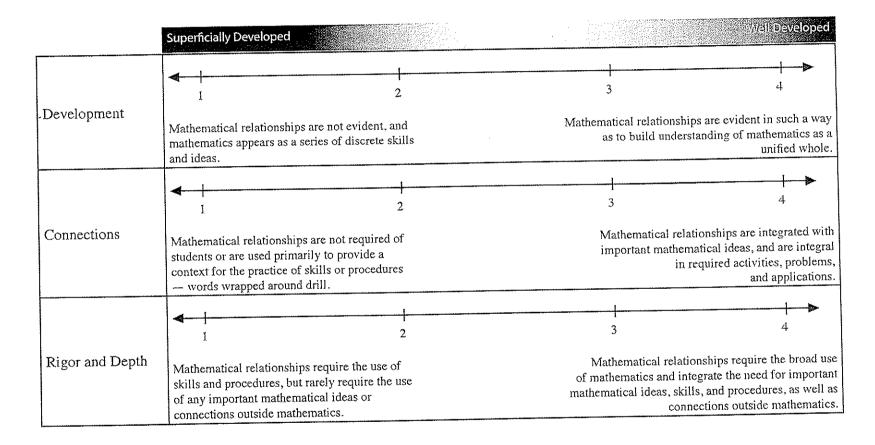
Assessing Content Alignment to the Common Core State Standards for Mathematics

The Line Education Roundtable, The Indiana Department of Education, and

The Charles A. Dana Center at The University of Texas at Austin

2010-2011

Mathematical Relationships: Understanding the scoring



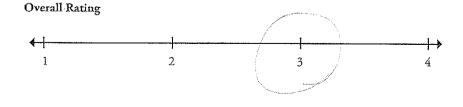
Reviewed By:	
Title of Instructional Materials:	

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



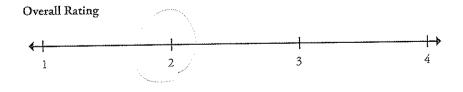
Reviewed By:		
Title of Instructional Materia	ls:	

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence



3

Reviewed By:	
Title of Instructional Materials:	

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	<u></u>
Title of Instructional Materials:	

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials	

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



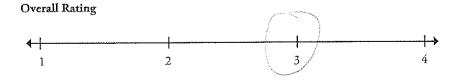
Reviewed By:	
Title of Instructional Materials:	

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation (y-2)/(x-1)=3. Noticing the regularity in the way terms cancel when expanding (x-1)(x+1), $(x-1)(x^2+x+1)$, and $(x-1)(x^3+x^2+x+1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 8 - THE NUMBER SYSTEM - 8.NS

Know that there are numbers that are not rational, and approximate them by rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
8.NS.1	Important Mathematical Ideas
Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.	1 2 3 4
	Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence
Writ	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Reviewed By:		
Title of Instructional Material	S:	

MATHEMATICS: GRADE 8 - THE NUMBER SYSTEM - 8.NS

Know that there are numbers that are not rational, and approximate them by rational numbers.	Summary and documentation met. Cite examples from the			uster, and standa	ard are
8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between	Important Mathematical Ideas	1	2		4
1.4 and 1.5, and explain how to continue on to get better approximations.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			
	Portions of the domain, clu developed in the instruction			re missing or no	t well
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials.	

Work with radicals and integer exponents.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
8.EE.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.	Important Mathematical Ideas 1 2 3 4
	Skills and Procedures 2 3 4
	Mathematical Relationships 1 2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	
With County 3	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating I I I I I I I I I

Reviewed By:	
Title of Instructional Materials:	

Work with radicals and integer exponents.	Summary and documentati met. Cite examples from th		domain, clus	ter, and stand	dard are
8.EE.2 Use square root and cube root symbols to represent solutions to equations	Important Mathematical Ideas				
of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.			2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships		2	3	 → 4
	Summary / Justification / E	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.				No. of the Control of	
Unit	Portions of the domain, cludeveloped in the instruction			missing or no	ot well
	Overall Rating				<u> </u>
	Overon reading	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Work with radicals and integer exponents.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, clus	ster, and stan	dard are
8.EE.3		Section 200			
Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as 3 × 10° and the population of the world	Important Mathematical Ideas	1	2.	3	4
as 7 × 10°, and determine that the world population is more than 20 times larger.	Skills and Procedures	1	1 2	3	4
	Mathematical Relationships		 2	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
	Portions of the domain, cluded developed in the instruction	ster, and sta nal materials	ndard that are s (if any):	missing or n	ot well
	Overall Rating	(2	3	 → 4

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Reviewed By:	
Title of Instructional Materials:	

Work with radicals and integer exponents.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
8.EE.4	Important Mathematical Ideas
Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.	Skills and Procedures 1 2 3 4 Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	
Unit 3	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

Understand the connections between proportional relationships, lines, and linear equations.	Summary and documentation met. Cite examples from the		ie domain, c	luster, and standa	ard are
8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	Important Mathematical Ideas	1	<u>1</u> 2	3	4
	Skills and Procedures	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Mathematical Relationships Summary / Justification / E	{ I vidence	2	3	4
mulcate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cludeveloped in the instruction			are missing or no	t well
	Overall Rating	♦ 1	 2	1 3 /	 → 4

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Reviewed By:	
Title of Instructional Materials:	

Understand the connections between proportional relationships, lines, and linear equations.	Summary and documentation of how the domain, cluster, and standard armet. Cite examples from the materials.
8,EE.6	Important Mathematical Ideas
Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical-line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .	1 2 3 4
	Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	
White 8.9	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

Analyze and solve linear equations and pairs of simultaneous linear Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. equations. 8.EE.7a Important Mathematical Ideas 7. Solve linear equations in one variable. a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given Skills and Procedures equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers). Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Int 14 Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, cl	uster, and standa	ard are
7. Solve linear equations in one variable. b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	Important Mathematical Ideas Skills and Procedures	1	2 	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Mathematical Relationships Summary / Justification / E	1 vidence	2	3	4
	Portions of the domain, clu developed in the instruction			re missing or no	t well

23

Reviewed By:	
Title of Instructional Materials:	

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation met. Cite examples from the	on of how to	ne domain, c	luster, and stand	lard are
8.EE.8a					
Analyze and solve pairs of simultaneous linear equations.	Important Mathematical Ideas	(
Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.		1	2	/3 /	4
books of merocolor satisfy both equations simultaneously.	Skills and Procedures	4		L	
		I	2	3	4
	Mathematical Relationships	 			
		1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ev	ridence			
1) xit 15	Portions of the domain, clus developed in the instruction	ster, and sta	andard that a s (if any):	re missing or no	t well
	Overall Rating	1	2	1 3	

Reviewed By:	
Title of Instructional Materials:	

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
8. EE.8b 8. Analyze and solve pairs of simultaneous linear equations. b. Solve systems of two linear equations in two variables algebraically, and extract a solutions by graphic at the solutions.	Important Mathematical Ideas	1	2	3	4
and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ex	vidence.			
Unit 16	Portions of the domain, cludeveloped in the instruction			nissing or n	ot well
	Overall Rating	∢ [2	3	

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Reviewed By:	
Title of Instructional Materials:	

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.			
8. EE.8c 8. Analyze and solve pairs of simultaneous linear equations. c. Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of	Important Mathematical Ideas 1 2 3 4			
points intersects the line through the second pair.	Skills and Procedures 1 2 3 4			
	Mathematical Relationships 1 2 3 4			
	Summary / Justification / Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.				
Unit 15	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):			
	Overall Rating 1 2 3 4			

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Reviewed By:	
Title of Instructional Materials:	

Define, evaluate, and compare functions. Summary and documentation of how the domain, cluster, and met. Cite examples from the materials.			
8.F.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.1	Important Mathematical Ideas 1 2 3 4		
	Skills and Procedures 1 2 3 4		
	Mathematical Relationships 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Function notation is not required in Grade 8.	Summary / Justification / Evidence		
Indicate the chapter(s), section(s), and/or page(s) reviewed.			
Unite 8 + 9	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):		
	Overall Rating		

Reviewed By:	
Title of Instructional Materials:	

Define, evaluate, and compare functions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.			
S.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change. Indicate the chapter(s), section(s), and/or page(s) reviewed.	Important Mathematical Ideas 1 2 3	→ 4		
	Skills and Procedures 1 2 3	4		
	Mathematical Relationships 1 2 3	4		
	Summary / Justification / Evidence Portions of the domain, cluster, and standard that are missing or not developed in the instructional materials (if any):	 well		
	Overall Rating 1 2 3	- → 4		

Reviewed By:	
Title of Instructional Materials:	

Define, evaluate, and compare functions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
8.F.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points $(1,1)$, $(2,4)$ and $(3,9)$,	Important Mathematical Ideas 1 2 3 4
which are not on a straight line.	Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence Portions of the domain, cluster, and standard that are missing or not well
Unide 8,7 12 Let	developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

Use functions to model relationships between quantities.	Summary and documentation met. Cite examples from the	ion of how e material	the domain, clus	ter, and stand	dard are
8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. Indicate the chapter(s), section(s), and/or page(s) reviewed.	Important Mathematical Ideas	← 1	2	3	4
	Skills and Procedures	← 	2	3	4
	Mathematical Relationships	1	2	 3	
	Summary / Justification / E	vidence			
	Portions of the domain, cludeveloped in the instruction	ster, and s nal materi	standard that are i als (if any):	missing or no	ot well
	Overall Rating	← 1	2/	3	4

Reviewed By:	
Title of Instructional Materials:	

Use functions to model relationships between quantities.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	Important Mathematical Ideas	1	2	3	 → 4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships		2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence				
unité 5 le	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):				
	Overall Rating	1	2	3	4

Reviewed By:		
Title of Instructional Materials:	:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentat met. Cite examples from the		e domain, clus	ster, and stand	lard are
8.G.1a1. Verify experimentally the properties of rotations, reflections, and translations:	Important Mathematical Ideas		2	3	
a. Lines are taken to lines, and line segments to line segments of the same length.	Skills and Procedures	(2	3	 → 4
	Mathematical Relationships	1	 2	3	4
	Summary / Justification / I	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cl developed in the instruction		(if any):	missing or no	
	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentat met. Cite examples from the		domain, clus	ster, and stand	lard are
8.G.1b	Important Mathematical Ideas	~7° t.	t	1	1.
 Verify experimentally the properties of rotations, reflections, and translations: 	Important Mathematical fueas	1	2	3	4
b. Angles are taken to angles of the same measure.		and the second			
	Skills and Procedures	< 			
		1	2	3	4
		100			
	Mathematical Relationships	 			 ->
		1	2	3	4
	Summary / Justification / E	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Unite 9 120	Portions of the domain, cl developed in the instruction	onal materials	(if any):		^
United to the second of the se	Not Sy	#\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			74
	Overall Rating		2	3	 →

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
8.G.1c	
 Verify experimentally the properties of rotations, reflections, and translations: 	Important Mathematical Ideas 1 2 3 4
c. Parallel lines are taken to parallel lines.	
	Skills and Procedures
	2 3 4
	Mathematical Relationships
	2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
Unit 20	Not Specific to faiallel
	Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and standarmet. Cite examples from the materials.	d are
8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections; and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	Important Mathematical Ideas 1 2 3	4
exhibits the congruence between them.	Skills and Procedures 1 2 3	4
	Mathematical Relationships 1 2 3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence Portions of the domain, cluster, and standard that are missing or not developed in the instructional materials (if any):	well
	Overall Rating 1 2 3	4

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, cl	uster, and stand	ard are
8.G.3					
Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	← 1	2	3	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ex	vidence			
Unit 00 /	Portions of the domain, cludeveloped in the instruction	ster, and sta	andard that and	re missing or no	t well
	Overall Rating	1	2	1	- → 4

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documenta met. Cite examples from	ation of how the	e domain, clu	ster, and stan	dard are
8.G.4		and the second second			
Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	Important Mathematical Idea	1	2	3	 1 →
	Skills and Procedures	(
		j	2	3	4
	Mathematical Relationships				
			2	3	4
	Summary / Justification /	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.			and the second s		
	Portions of the domain, c developed in the instructi	luster, and star ional materials	ndard that are (if any):	e missing or n	ot well
	Overall Rating				
	5.2.du (\du)(9		2	3	

The Charles A. Dana Center

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Reviewed By:		
Title of Instructional Materials:	»:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation met. Cite examples from the		domain, cl	uster, and standa	ard are
Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the sum of	Important Mathematical Ideas	1	2	3	 - >
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / English Portions of the domain, cludeveloped in the instruction	ster, and sta		are missing or no	t well
	Overall Rating	1	2	3	 4

Reviewed By:	
Title of Instructional Materials:	

Understand and apply the Pythagorean Theorem.	Summary and documentation of how the domain, cluster, and standar met. Cite examples from the materials.				
8.G.6 Explain a proof of the Pythagorean Theorem and its converse.	Important Mathematical Ideas 2 3 4				
	Skills and Procedures 1 3 4				
	Mathematical Relationships 2 3 4				
	Summary / Justification / Evidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Unit OH	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):				
	Overall Rating 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				

Reviewed By:	
Title of Instructional Materials:	

Understand and apply the Pythagorean Theorem.	Summary and documentation met. Cite examples from the			er, and stan	dard are
8.G.7	Important Mathematical Ideas				•
Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	← 1		3	
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	FOLIA				
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, clu developed in the instruction			nissing or n	ot well
	Overall Rating	{ 	2	3	

Reviewed By:	
Title of Instructional Materials:	

Understand and apply the Pythagorean Theorem.	Summary and documentation met. Cite examples from the			domain, cl	uster, and standa	rd are
8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	Important Mathematical Ideas	← 1		2	3	4
	Skills and Procedures	← 		2	3	4
	Mathematical Relationships	1	· · · · · · · · · · · · · · · · · · ·	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E Portions of the domain, cludeveloped in the instruction	uster, a	ınd staı		are missing or not	: well
	Overall Rating	 		2	3	— i→ 4

Reviewed By:	
Title of Instructional Materials:	

Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.	Summary and documentati met. Cite examples from the	on of how the materials.	he domain, c	luster, and standard a
8.G.9 Know the formulas for the volumes of cones, cylinders, and spheres and use	Important Mathematical Ideas	4		
them to solve real-world and mathematical problems.		1	2	3
	Skills and Procedures	1	2	3 4
	Mathematical Relationships	← 1	2	3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ev	vidence		
Unit 21 2	Portions of the domain, cluded developed in the instruction	ster, and stand materials	andard that a s (if any):	re missing or not well
	Overall Rating	1	2	1 1

Reviewed By:	
Title of Instructional Materials:	

Investigate patterns of association in bivariate data.	Summary and documentation met. Cite examples from the		domain, clus	er, and stand	ard are
8.SP.1	Important Mathematical Ideas	4			
Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.			2	3	4
	Skills and Procedures		2	3	4
	Mathematical Relationships		2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.			J	and the same of th	
Unit 10	Portions of the domain, clu developed in the instruction	uster, and stan	dard that are (if any):	missing or no	ot well
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Investigate patterns of association in bivariate data.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.	are
8.SP.2	Important Mathematical Ideas	→
Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	3	4
	Skills and Procedures 1 2 3	4
	Mathematical Relationships 1 2 3	4
	Summary / Justification / Evidence	
Indicate the chapter(s), section(s), and/or page(s) reviewed.		
Unit 10	Portions of the domain, cluster, and standard that are missing or not we developed in the instructional materials (if any):	eli
	Overall Rating 1 1 1 1 1 1 1 1 1 2 3	 → 4

Reviewed By:	
Title of Instructional Materials:	

Investigate patterns of association in bivariate data.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. For example, in a linear model for a biology experiment, interpret a slope of	Important Mathematical ideas 1 2 3 4
1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.	Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
Unit 11	Overall Rating 1 2 3 4

Re	eviewed By:	
Ti	tle of Instructional Materials:	

Investigate patterns of association in bivariate data.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
8.SP.4 Understand that patterns of association can also be seen in bivariate	Important Mathematical Ideas
categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative	1 2 3 4
frequencies calculated for rows or columns to describe possible association between the two variables. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?	Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	
Unit 10	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Beting
	Overall Rating 1 2 3 4

Sove all the examples!

R UNDTABLE 20

* Stopped locking @ each topic and assessed the program as

Instructional Materials Analysis and Selection

Phase 3: Assessing Content Alignment to the Common Core State Standards for Mathematics

Overall: This curriculum stores a solid "4" or all standards. It addresses the topics in diplay however, this is not a textbook for all schools. Classrooms would need to loo mulperd w/ computers for every student.

Grade 8

Applic Arrived





Phase 3:

Assessing Content Alignment to the Common Core State Standards for Mathematics

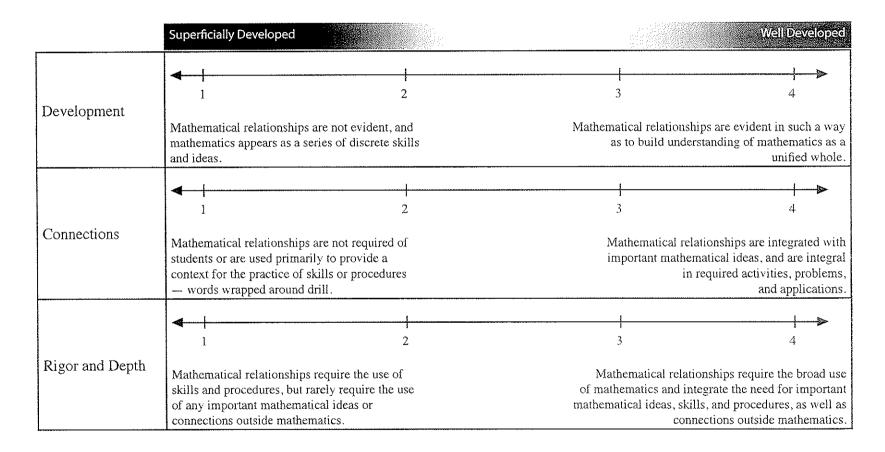
A project of

The Indiana Education Roundtable, The Indiana Department of Education, and

The Charles A. Dana Center at The University of Texas at Austin

2010-2011

Mathematical Relationships: Understanding the scoring



I	Reviewed By:
Documenting Alignment to the Standards for Mathematical Practice	Title of Instructional Materials:
1. Make sense of problems and persevere in solving them.	
givens, constraints, relationships, and goals. They make conjectures about simply jumping into a solution attempt. They consider analogous problems gain insight into its solution. They monitor and evaluate their progress and the problem, transform algebraic expressions or change the viewing windor proficient students can explain correspondences between equations, verbal relationships, graph data, and search for regularity or trends. Younger studes solve a problem. Mathematically proficient students check their answers to	the form and meaning of the solution and plan a solution pathway rather than s, and try special cases and simpler forms of the original problem in order to dehange course if necessary. Older students might, depending on the context of ow on their graphing calculator to get the information they need. Mathematically descriptions, tables, and graphs or draw diagrams of important features and ents might rely on using concrete objects or pictures to help conceptualize and opproblems using a different method, and they continually ask themselves, "Does geomplex problems and identify correspondences between different approaches.
Indicate the chapter(s), section(s), or page(s) reviewed.	Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):
Summary/Justification/Evidence Rolly Makes Students think	Overall Rating

Reviewed By:	
Title of Instructional Materials:	

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

 $Indicate \ the \ chapter(s), section(s), or \ page(s) \ reviewed.$

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By:	
Title of Instructional Materials:	

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Overall Rating

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Overall Rating

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:
Title of Instructional Materials:
a solving a mathematical problem. These tools might include pencil and paper, concrete algebra system, a statistical package, or dynamic geometry software. Proficient le or course to make sound decisions about when each of these tools might be helpful, kample, mathematically proficient high school students analyze graphs of functions sible errors by strategically using estimation and other mathematical knowledge. enable them to visualize the results of varying assumptions, explore consequences, its at various grade levels are able to identify relevant external mathematical resources. solve problems. They are able to use technological tools to explore and deepen their
Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):
Overall Rating

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when models, a ruler, a protractor, a calculator, a spreadsheet, a computer students are sufficiently familiar with tools appropriate for their grad recognizing both the insight to be gained and their limitations. For ex and solutions generated using a graphing calculator. They detect pos-When making mathematical models, they know that technology can and compare predictions with data. Mathematically proficient studen such as digital content located on a website, and use them to pose or understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Reviewed By:	
Title of Instructional Materials:	

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By:	
Title of Instructional Materials:	

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Overall Rating

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Tirle of Instructional Materials:	

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation (y-2)/(x-1)=3. Noticing the regularity in the way terms cancel when expanding (x-1)(x+1), $(x-1)(x^2+x+1)$, and $(x-1)(x^3+x^2+x+1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 8 - THE NUMBER SYSTEM - 8.NS

Know that there are numbers that are not rational, and approximate them by rational numbers.	Summary and documentation of how the domain, cluster, and standard ar met. Cite examples from the materials.				
8.NS.1					
Know that numbers that are not rational are called irrational. Understand	Important Mathematical Ideas	 			
informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.		1	2	3	4
	Skills and Procedures	4			
		1	2	3	4
	Mathematical Relationships	4.1		1	: .
	, i	1	2	3	4
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Wow!				
Topic #1	Portions of the domain, cluded developed in the instruction	ster, and sta	andard that are s (if any):	missing or n	ot well
î	Overall Rating	***************************************			//\-
	J voidii Kating	(-/- -> -

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 8 - THE NUMBER SYSTEM - 8.NS

Know that there are numbers that are not rational, and approximate them by rational numbers.	Summary and documentation of how the domain, cluster, and stan met. Cite examples from the materials.				
8.NS.2 Use rational approximations of irrational numbers to compare the size of	Important Mathematical Ideas	(2	3	 →
irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.	Skills and Procedures	<u> </u>			
		1	2	3	4
	Mathematical Relationships	4 	2	3	}
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic	Portions of the domain, clu developed in the instructio			missing or n	ot well
	Overall Rating	 			
		1	2	3	4

Reviewed By:	

Title of Instructional Materials:

MATHEMATICS: GRADE 8 - EXPRESSIONS AND EQUATIONS - 8.EE

Work with radicals and integer exponents.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.				
8.EE.1					
Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	4 1	2	3	4
	Mathematical Relationships	1	2	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Programme Control of the Control of				
Topic 2	Portions of the domain, clus developed in the instruction	ster, and st nal material	andard that are s (if any):	missing or no	ot well
1	Overall Rating				

Reviewed By:	
Title of Instructional Materials:	

Work with radicals and integer exponents.	Summary and documentation met. Cite examples from the			ter, and stan	dard are
8.EE.2	Important Mathematical Ideas			Ţ.	
Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.	important wathernation recus	1	2	3	4
	Skills and Procedures	← } I	2	3	
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Illustrations	s are	amazing		
700°C	Portions of the domain, clu developed in the instruction			missing or r	not well
	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Work with radicals and integer exponents.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
8.EE.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as 3 × 10° and the population of the world	Important Mathematical Ideas	1	2	3	
population of the United States as 3 × 10° and the population of the world as 7 × 10°, and determine that the world population is more than 20 times larger.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 2	Portions of the domain, clu developed in the instruction	ster, and st nal material	andard that are s (if any):	missing or ne	ot well
	Overall Rating	4	- 1 - 2	3	

Reviewed By:	
Title of Instructional Materials:	

Work with radicals and integer exponents.	Summary and documentation met. Cite examples from the			ster, and star	idard are
8.EE.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for	Important Mathematical Ideas	(2	3	4
seafloor spreading). Interpret scientific notation that has been generated by technology.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	 >
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 2	Portions of the domain, clus developed in the instruction			missing or n	ot well
	Overall Rating	4 1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Understand the connections between proportional relationships, lines, and linear equations.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.				
8.EE.5					
Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	← 1	2	 3	
	Summary / Justification / Ev	vidence	e		
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
70pics 7, 8, 9	Portions of the domain, cluded developed in the instruction			re missing or I	not well
	Overall Rating				
	o vo. an rading	1	2	3	 -> 4

Reviewed By:	
Title of Instructional Materials:	

Understand the connections between proportional relationships, lines, and linear equations.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				ıdard are
8,EE.6	Important Mathematical Ideas				
Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .		1	2	3	4
	Skills and Procedures	< 		1	
		1	2	3	4
	Mathematical Relationships				
		1	2	3	4
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 8+9	Portions of the domain, cluded developed in the instruction			missing or r	iot well
	Outsell Dating				
	Overall Rating	1	2	3	4

Reviewed By:	

Title of Instructional Materials:

MATHEMATICS: GRADE 8 - EXPRESSIONS AND EQUATIONS - 8.EE

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation of how the domain, cluster, and standard at met. Cite examples from the materials.				dard are
 8.EE.7a 7. Solve linear equations in one variable. a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form 	Important Mathematical Ideas Skills and Procedures	1	2	3	4
x = a, $a = a$, or $a = b$ results (where a and b are different numbers).	Mathematical Relationships	1 1	2	3 	4 → 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ev	vidence			
Topic 14	Portions of the domain, clus developed in the instruction	ster, and st nal material	andard that are s (if any):	missing or no	ot well
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation met. Cite examples from the			ster, and stan	dard are
8.EE.7b 7. Solve linear equations in one variable. b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	Important Mathematical Ideas	1	2	3	
	Skills and Procedures	∢ 1	2	3	
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 13 + 14	Portions of the domain, clu developed in the instruction			missing or n	ot well
	Overall Rating	← 1	2	3	

23

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 8 - EXPRESSIONS AND EQUATIONS - 8.EE

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation met. Cite examples from the	on of how to	he domain, cl	uster, and star	ndard are
8.EE.8a8. Analyze and solve pairs of simultaneous linear equations.	Important Mathematical Ideas	4	· ·		
Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.		1	2	3	4
, , , ,	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 15	Portions of the domain, clus developed in the instruction	ster, and st al material	andard that ar s (if any):	e missing or r	not well
;	Overall Rating				
		1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 8 - EXPRESSIONS AND EQUATIONS - 8.EE

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentati met. Cite examples from th			ster, and stand	dard are
8.EE.8b 8. Analyze and solve pairs of simultaneous linear equations.	Important Mathematical Ideas	4 		3	
b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.	Skills and Procedures	∢ 1	2	3	} 4
	Mathematical Relationships	{ 	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 10	Portions of the domain, cludeveloped in the instruction			missing or n	ot well
	Overall Rating	1	2	3	4

Reviewed By:	

Title of Instructional Materials:

MATHEMATICS: GRADE 8 - EXPRESSIONS AND EQUATIONS - 8.EE

Analyze and solve linear equations and pairs of simultaneous linear equations.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
 8. Analyze and solve pairs of simultaneous linear equations. c. Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair. 	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	1	2	3	 → 4
	Mathematical Relationships	1	2	3	4
Indicate the chanter(s), section(s), and/or name(s) reviewed	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cludeveloped in the instruction	ster, and s nal materia	tandard that are Is (if any):	missing or n	ot well
	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Define, evaluate, and compare functions.	Summary and documentatimet. Cite examples from the			ster, and stand	dard are
8.F.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.	Important Mathematical Ideas	1	2	3	 → 4
	Skills and Procedures	1	2	3	 }-4
	Mathematical Relationships	1	2	3	4
1 Function notation is not required in Grade 8. Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			
Topoics 2 + 9	Portions of the domain, clu developed in the instructio			missing or n	ot well
	Overall Rating	1	2	3	

Reviewed By:	

Title of Instructional Materials:

MATHEMATICS: GRADE 8 - FUNCTIONS - 8.F

Define, evaluate, and compare functions.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.				
8.F.2	· · · · · · · · · · · · · · · · · · ·				
Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which	Important Mathematical Ideas	1	2	3	
function has the greater rate of change.	Skills and Procedures	4-1			
		1	2	3	4
	Mathematical Relationships	 			
		1	2	3	4
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 8 + 9	Portions of the domain, cludeveloped in the instruction			missing or no	ot well
	Overall Rating	4-1		<u> </u>	
		1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Define, evaluate, and compare functions.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.				dard are
8.F.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length	Important Mathematical Ideas	1	2	3	} 4
s not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.	Skills and Procedures	1	2	3	 }-4
	Mathematical Relationships	1	2	3	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 7,1,12	Portions of the domain, clu developed in the instructio			e missing or n	ot well
	Overall Rating	4 1	2	3	

Reviewed By:		
Title of Instructional Materials		

Use functions to model relationships between quantities.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
8.F.4			_		
Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these	Important Mathematical Ideas	1	2	3	4
from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph	Skills and Procedures	4-1			
or a table of values.		1	2	3	4
	Mathematical Relationships	 			
		1	2	3	4
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 849	Portions of the domain, cludeveloped in the instruction			missing or no	ot well
	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Use functions to model relationships between quantities.	Summary and documentation of how the domain, cluster, and sta met. Cite examples from the materials.				
8.F.5	Important Mathematical Ideas	4.1	1	r	f s.
Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	important wathematical ideas	1	2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	} 4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 5 4 6	Portions of the domain, clu developed in the instruction			missing or n	ot well
	Overall Rating	«		3	

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and stand met. Cite examples from the materials.					Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.		dard are
8.G.1a	Important Mathematical Ideas	4-1						
 Verify experimentally the properties of rotations, reflections, and translations: 		1	2	3	4			
 Lines are taken to lines, and line segments to line segments of the same length. 	Skills and Procedures							
	Onins and 1 Todegures	1	2	3	4			
	Mathematical Relationships	 						
		1	2	3	4			
	Summary / Justification / Ev	vidence						
Indicate the chapter(s), section(s), and/or page(s) reviewed.								
Topics 19 4 20	Portions of the domain, cluded developed in the instruction			missing or ne	ot well			
	Overall Rating	← 1	2	3	4			

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
8.G.1b	Important Mathematical Ideas	4.1.	1	<u> </u>		
 Verify experimentally the properties of rotations, reflections, and translations: 	in potani manomatica	1	2	3	4	
b. Angles are taken to angles of the same measure.						
	Skills and Procedures	 				
		1	2	3	4	
	Mathematical Relationships	{ 				
		1	2	3	4	
	Summary / Justification / E	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
Topics 19 + 20	Portions of the domain, clu developed in the instruction			e missing or n	ot well	
	Overall Rating	 				
		1	2	3	4	

33

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and standard ar met. Cite examples from the materials.				
8.G.1c					
 Verify experimentally the properties of rotations, reflections, and translations: 	Important Mathematical Ideas	1	2	3	4
c. Parallel lines are taken to parallel lines.					
	Skills and Procedures				→
		1	2	3	4
	Mathematical Relationships	41	1	ı	1 5
		1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 20	Portions of the domain, clu developed in the instructio			missing or no	ot well
	Overall Rating	+	2	3	 -> 4

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and star met. Cite examples from the materials.				
8.G.2	Important Mathematical Ideas	. 1	1	t	1 6
Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	♦ 1	2	3	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 20	Portions of the domain, clu developed in the instruction			e missing or n	ot well
	Overall Rating	 	2	3	—— → 4

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.				dard are
8.G.3					
Describe the effect of dilations, translations, rotations, and reflections on two- dimensional figures using coordinates.	Important Mathematical Ideas	i i	2	3	4
	Skills and Procedures	{- 	1 2	3	
	Mathematical Relationships	 		3	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 20	Portions of the domain, cluded developed in the instruction			missing or no	ot well
	Overall Rating	1	2		4

Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.				lard are
8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	Important Mathematical Ideas	1	2	3	
	Skills and Procedures	< 	2	3	
	Mathematical Relationships	1	2	3	 -> 4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					:
	Portions of the domain, clu developed in the instructio			missing or n	ot well
	Overall Rating	1	2	3	 4

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Reviewed By:	
Title of Instructional Materials:	

Understand congruence and similarity using physical models, transparencies, or geometry software.	Summary and documentation of how the domain, cluster, and standard ar met. Cite examples from the materials.				
8.G.5					
Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For	Important Mathematical Ideas	(2	3	4
example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.	Skills and Procedures	4			
		1	2	3	4
	Mathematical Relationships	1	2	3	4
	Summary / Justification / Ev	/idence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 17 + 18	Portions of the domain, cluded developed in the instruction			e missing or n	ot well
	Overall Paties				
	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Understand and apply the Pythagorean Theorem.	Summary and documentation of how the domain, cluster, and standard at met. Cite examples from the materials.				dard are
8.G.6 Explain a proof of the Pythagorean Theorem and its converse.	Important Mathematical Ideas	∢ 1	2	3	} 4
	Skills and Procedures	1	2	3	
	Mathematical Relationships	1	2	3	
	Summary / Justification / I	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cl developed in the instruction			e missing or r	not well
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Understand and apply the Pythagorean Theorem.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.				dard are
8.G.7					
Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	∢ 1	2	3	
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 2	Portions of the domain, clu developed in the instructio	ister, and st nal material	andard that are s (if any):	missing or no	ot well
	Overall Rating	 	2	3	 > 4

Reviewed By:	
Title of Instructional Materials:	

Understand and apply the Pythagorean Theorem.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.				
8.G.8					
Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	Important Mathematical Ideas	∢-	2	3	4
	Skills and Procedures	4 -]	2	3	
	Mathematical Relationships	1			 >
	Summary / Justification / Ev	vidence		-	
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topics 3+4	Portions of the domain, cluded developed in the instruction	ster, and s nal materia	tandard that are	missing or n	ot well
t de la companya de	Overall Rating	4 [1.5
		1	2	3	}

Reviewed By:	
Title of Instructional Materials:	

Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
8.G.9						
Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	Important Mathematical Ideas	1	2	3	4	
	Skills and Procedures	 				
	The second secon	1	2	3	4	
	Mathematical Relationships	1	2	3	4	
	Summary / Justification / E	vídence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
TOPIC 21	Portions of the domain, cludeveloped in the instruction	ster, and s nal materia	tandard that are	e missing or n	ot well	
	Overall Rating				 	
		1	2	3	4	

Reviewed By:		
Title of Instructional Ma	iterials:	

Investigate patterns of association in bivariate data.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
8.SP.1					***************************************	
Construct and interpret scatter plots for bivariate measurement data to	Important Mathematical Ideas	ᡧ			+>	
investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.		ž	2	3	4	
	Skills and Procedures	4				
		' '	7	3	4	
		•	2	,	*	
	Mathematical Relationships	« 		<u>-</u>		
		1	2	3	4	
	Summary / Justification / Ev	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
Topic 10	Portions of the domain, cluded developed in the instruction	ster, and st nal material	andard that are s (if any):	missing or n	ne Hew to	
	Overall Rating	4 1	l	3		

Reviewed By:	
Title of Instructional Materials:	4

Investigate patterns of association in bivariate data.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
8.SP.2						
Know that straight lines are widely used to model relationships between two	Important Mathematical Ideas	4				
quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.		1	2	3	4	
	Skills and Procedures	4			 >	
	***************************************	1	2	3	4	
		1	2	,	7	
	Mathematical Relationships	 				
		1	2	3	4	
	Summary / Justification / Ev	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.	4411					
Topic 10	Portions of the domain, cluded developed in the instruction			missing or no	ot well	
	Overall Rating	4 1	1			
		4	1	<u> </u>		
		1	2	3	4	

Reviewed By:	
Title of Instructional Materials:	

Investigate patterns of association in bivariate data.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is	Important Mathematical Ideas	1	2	3	4
associated with an additional 1.5 cm in mature plant height.	Skills and Procedures	1	2	3	
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic II	Portions of the domain, cludeveloped in the instruction	uster, and so	tandard that are Is (if any):	e missing or n	ot well
	Overall Rating	1	2	3	} 4

Reviewed By:	
Title of Instructional Materials:	

Investigate patterns of association in bivariate data.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
8.SP.4					
Understand that patterns of association can also be seen in bivariate	Important Mathematical Ideas	4			
categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association		1	2	3	4
between the two variables. For example, collect data from students in your	Skills and Procedures	 	<u> </u>		 >
class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?	ool nights and whether or		2	3	4
nare a same name and to have showed:	Mathematical Relationships	4.1	1	•	1.5
	Watternation relationships	4	?.	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Topic 10	Portions of the domain, clus developed in the instruction			e missing or r	not well
	Overall Rating		-		
		1	2	3	4

AgileMind Digital Math

3-4 5+10000

	MATHEMATICAL PRACTICES					Summary/	Missing pieces of	Overall
		Chapter/Section/Page				Justification/Evidence	Math Practice	Rating
	Make sense of problems and persevere in solving them.	All				Promised in Introduction		
	2. Reason abstractly and quantitatively.	All				Promised in Introduction		
	3. Construct viable arguments and critique the reasoning of others.	All				Promised in Introduction		3
	4. Model with mathematics.	All				Promised in Introduction		3
	5. Use appropriate tools strategically.	All				Promised in Introduction		
	6. Attend to precision.	All				Promised in Introduction		
	7. Look for and make use of structure.	All				Promised in Introduction		
	8. Look for and express regularity in repeated reasoning.	All				Promised in Introduction		
3.NS	THE NUMBER SYSTEM		Important	Skills and	Math	Summary/	Missing portions of	Overall
		Chapter/Section/Page	, Math Ideas	Procedures	Relationships	Justification/Evidence	Standards	Rating
	Know that there are numbers that are not rational, and approximate them by rational numbers.							
3.NS.1	Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeates eventually, and convert a decimal expansion which repeats eventually into a rational number.	1						
3.NS.2	Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions	1						
3.EE	EXPRESSIONS AND EQUATIONS	la en la mais de la com						
	Work with radicals and integer exponents.							
8.EE.1	Know and apply the properties of integer exponents to generate equivalent numberical expressions.	2						
8.EE.2	Use square root and cube root symbols to represent solutions to equations of the form x^2 = p, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that square root of 2 is irrational.	1						
8.EE.3	Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.	2						
3.EE.4	Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities. Interpret scientific notation that has been generated by technology. Understand the connections between proportional relationships, lines, and	2						

8.EE.5	Graph proportional relationships, interpreting the unit rate as the slope of the			<u> </u>				
	graph. Compare two different proportional relationships represented in							
	different Ways. Ex: compare a distance-time graph to a distance-time equations to determine which of two moving objects has greater speed.	7, 8, 9						
1	which of two moving objects has greater speed.	7,0,5						
8.EE.6	Use similar triangles to explain why the slope \it{m} is the same between any two			:				
-	distinct points on a non-vertical line in the coordinate plane; derive the			:				
1	equation $y=mx$ for a line through the origin and the equation $y=mx+b$ for a	8,9	:					
	line intercepting the vertical axis at b .	•		:				
	Analyze and solve linear equations and pairs of simultaneous linear							
	equations.							
8.EE.7a	Solve linear equations in one variable.				1			
	A. Give examples of linear equations in one variable with one solution,							
	infinitely many solutions, or no solutions. Show which of these possibilities is							
	the case by successively transforming the given equation into simpler forms,							
	until an equivalent equation of the form x = a, a = a, or a = b results (where a	14				t .	:	1
	_ and he are different numbers)	:	: 					
8.EE.7b	Solve linear equations in one variable.			1				
	B. Solve linear equations with rational number coefficients, including equations	-						
	whose solutions require expanding expressions using the distributive property	13, 14						
8.EE.8a	and collecting like terms. Analyze and solve pairs of simultaneous linear equations.							
O.EE.08	A. Understand that solutions to a system of two linear equations in two			:				
	variables correspond to points of intersection of their graphs, because points of	15						
	intersection satisfy both equations simultaneously.	13						
8.EE.8b	Analyze and solve pairs of simultaneous linear equations.			**************************************		***************************************		
	B. Solve systems of two linear equations in two variables algebraically, and							
	estimate solutions by graphing the equations. Solve simple cases by inspection.					•		
	Ex: $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 26$ cannot	16				•	:	
	simultaneously he 5 and 6		:		.i.	·	<u> </u>	
8.EE.8c	Analyze and solve pairs of simultaneous linear equations.			İ		•		:
	C. Solve real-world and mathematical problems leading to two linear equations	• •						
	in two variables. Ex: Given coordinates for two pairs of points, determine whether the line							
	through the first pair of points intersects the line through the second pair.	: 4-		:				
		15		:				
	FUNCTIONS			:				
İ								
	Define, evaluate, and compare functions.			m1 in : 1			and the second	
			Important	Skills and	Math	Summary/	Missing portions o	
		Chapter/Section/Page	Math Ideas	Procedures	Relationships	Justification/Evidence	Standards	Rating
8.F.1	Understand that a function is a rule that assigns to each input exactly one							
	output. The graph of a function is the set of ordered pairs consisting of an input							
	and the corresponding output. (Note: Function notation is not required in 8th grade.)							
		8, 9	3	3	3	3		3
8.F.2	Compare properties of two functions each represented in a different way				- /			********************************
	(aggebraically, graphically, numerically in tables, or by verbal descriptions). Ex:			:				
	Given a linear function represented by a table of values and a linear function represented by an			i				
	algebralic expression, determine which function has the greater rate of change.	8, 9	3	3	3	3		3
		· U, J	<u> </u>			, ,	:	

8.F.3	Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. Ex: The function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points $(1,1)$, $(2,4)$ and $(3,9)$ which are not on a straight line.	8, 9, 12	3	3	3	3		3
	Use functions to model relationships between quantitites.							
8.F.4	Construct a function to model a linear relationship between two quantities. Determine the reate of change and intial value of the function from a description of a relationship or from two (x,y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	8, 9	3	3	3	3		3
8.F.5	Describe qualitatively the functional releationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. GEOMETRY	5, 6	3	3	3	3		3
	Understand congruence and similarity using physical models, transparencies, or geometry software.							
8.G.1a	Verify experimentally the properties of rotations, reflections, and translations: a. Lines are taken to lines, and the line segments to line segments of the same length.	20, 19						
8.G.1b	Verify experimentally the properties of rotations, reflections, and translations: b. Angles are taken to angles of the same measure.	19, 20		:				
8.G.1c	Verify experimentally the properties of rotations, reflections, and translations: c. Parallel lines are taken to parallel lines. $\frac{7}{i}$	20					-	
8.G.2	Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	20						
8.G.3	Describe the effect of dilations, translations, rotations, and reflections on two- dimensional figures using coordinates.	20			-			
8.G.4	Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	None						Χ
8.G.5	Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. Ex: Arragnge three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.	17, 18						
	Understand and apply the Pythagorean Theorem.	·	:					

8.G.6	Explain a proof of the Pythagorean Theorem and its converse.	2					
8.G.7 8.G.8	Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. Apply the Pythagorean Theorem to find the distance between two points in a	2					
0.0.0	coordinate system.	3, 4					
	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.						A A A A A A A A A A A A A A A A A A A
8.G.9	Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	21					
	STATISTICS AND PROBABILITY						
	Investigate patterns of association in bivariate data.						
8.SP.1	Construct and interpret scatter plots for bivariate measurements data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and poplinear association.	10					
8.SP.2	Know that straight lines are widely used to model relationsips between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	10				Appendix of the second	
8.SP.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. Ex: In a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.	11					
8.SP.4	Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or colums to describe possible association between the two variables. Ex: Collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those				1		
	who have a curfew also tend to have chores?	10	•	:			